Food and Drink

6

On that day the workman Menna gave the pot of fresh fat to the chief of the Medjay [police] Mentmose who said "I will pay you for it with barley."

MEMORANDUM OF PAYMENT OWED

One of the most important and characteristic aspects of any civilization is the way that people were able to nourish themselves, the kinds of food and drink that were available to them. In a culture with the geographical advantages of ancient Egypt, where the fertile land was renewed yearly by the annual flooding of the Nile, the production of abundant food crops was usually a dependable resource (Fig. 38). With the assurance that fields would be refreshed with new silt and that water was plentiful, the people of Egypt were confident that they were provided for by the gods. Egypt remained basically an agricultural land with a society that was based on the tilling of the soil, and agriculture in one form or another was the main occupation of the greater part of the population.

Food was plentiful except in times when the annual flood was irregular, either too low or too high. To counter periods of inadequate production or natural threats to the supply, the Egyptians developed methods of food storage and preservation early in their history. The plagues described in the Bible certainly give some indications of the natural phenomena that had their effects on Egyptian agriculture. These exceptional occurrences could possibly be anticipated and provided for by stockpiling foodstuffs. It is probable that all levels of the population had enough to eat, although times of famine were also recorded. The primary difference was that the higher classes had larger resources to choose from and consequently a more varied diet.

As it is with many aspects of living in ancient Egypt discussed in this book, the evidence for the production, processing, and utilization of a useful range of food crops comes from several different sources. Some of the most important keys to studying the methods of Egyptian agriculture are the numerous tomb reliefs and examples of painting that illustrate the activities of the field and the estate. These

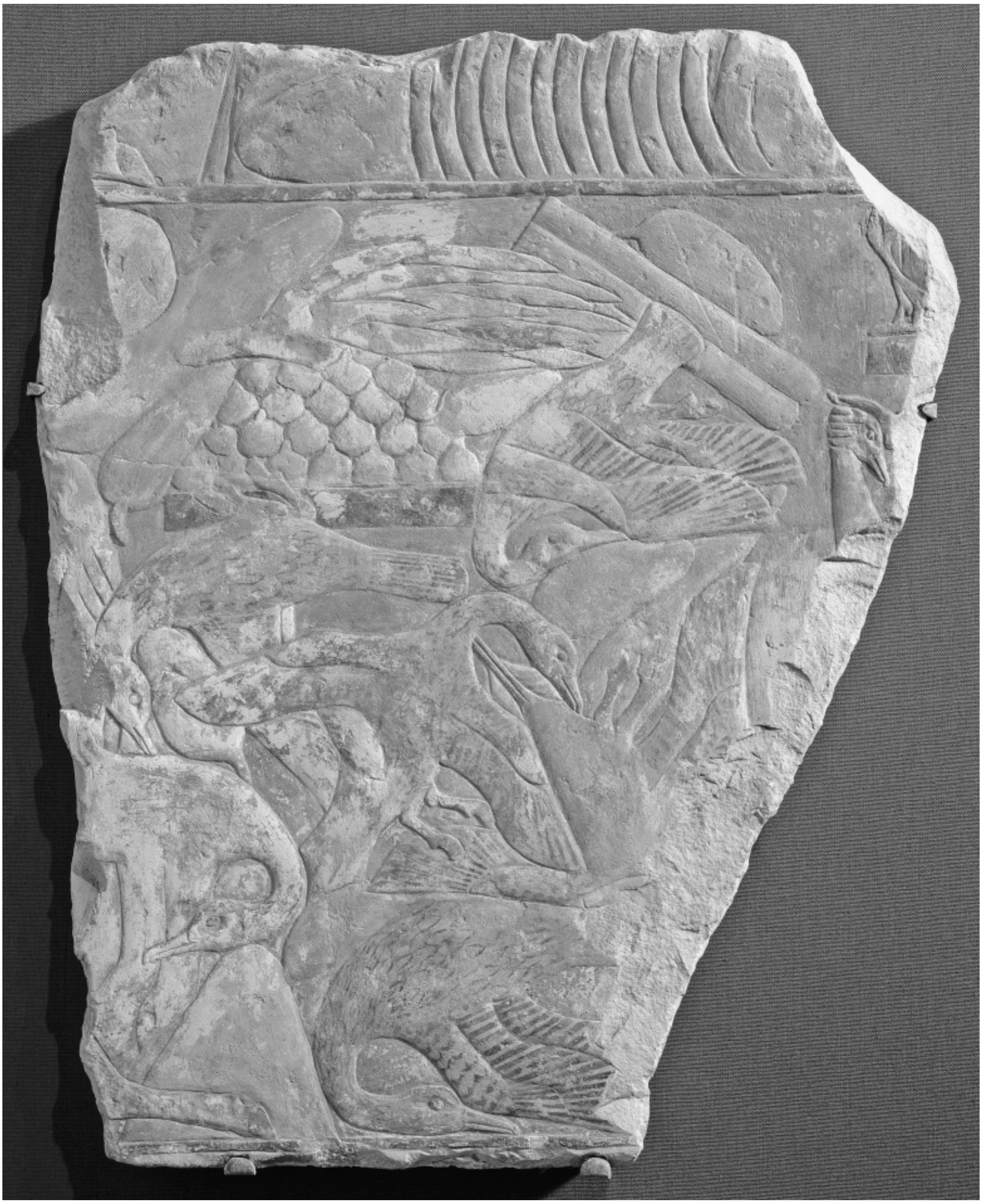


FIGURE 38 **A pile of food offerings. Dynasty Five or Six**
Tomb unknown, probably at Saqqara
This fragment from a tomb wall illustrates some of the foodstuffs available to the ancient Egyptians. These include ducks and geese, cucumbers (or squash), lettuce, figs, a side of ribs at the top, and parts of other cuts of meat.
Collection of the Detroit Institute of Arts.

are supplemented by written documentation in the form of lists, letters, and bills or memos of sale that discuss simple matters such as the amounts of produce of a farm or an estate, the times of sowing and reaping, and even the allocations of rations to work gangs. Some of the ancient Greek and Roman authors also give details about diet and agriculture when they describe the customs of the Egyptians, but these must be considered for the time in which they were written and how their accounts might have been colored by their own cultural biases.

Archaeological excavation has produced examples of the tools and the containers used in farm activities. Actual samples of food, such as loaves of bread, preserved cuts of meat, and dressed fowl, have been found in tombs. Archaeobotanical study, through the scientific examination of seeds, husks, and other plant residue, has also increased our knowledge of the range of foods available. Finally, the observation of contemporary farm activities in modern circumstances that are thought to compare with those in ancient times may lead to further speculation and insight into ancient practices. In many instances the farming techniques of the modern Egyptians can be observed with the possibility of gaining some idea of how their ancestors may have worked.

It is difficult to generalize about the diet – the food and drink – of all of the ancient Egyptians. The artistic representations and lists of offerings for the dead in the tombs, as well as remains of food and models of food meant for the spirit, all can be assumed to apply to the affluent, well-to-do nobility. What the ordinary workers consumed on a day-to-day basis is only gradually becoming better known. As a good example of how perceptions have changed, earlier excavators were not aware of techniques that would reveal the smallest remains of food materials such as seeds and husks. One important procedure now used by archaeologists is an analysis system called flotation. Samples of soil from an archaeological site are processed in water so that lighter materials such as carbonized seeds float to the surface, where they can be extracted and studied by paleobotanists. From this technique a considerable body of evidence is revealed about crops that were grown and food that was consumed and even yearly agricultural cycles and variations in crop production. The microscopic examination and further analysis of minute quantities of the residue in containers for food and drink have also contributed to knowledge of the materials and methods of their preparation.

The observation of the diet of the contemporary rural peoples of Egypt and in the Sudan, to the south, might give some clues to ancient practices, assuming that farm dwellers on the Nile today would have a comparable diet to that of the ancient people. The modern diet, observed from contemporary contacts with field workers and village dwellers, consists of a high proportion of bread, vegetables, rice and beans, a little poultry and fish, and very little meat, which is usually reserved for special occasions. Except for the rice, a food that was not available in antiquity, this is probably very similar to the ancient diet of people in similar occupations and positions in Egyptian society and perhaps in other ancient societies as well. In addition to rice, processed sugar, derived either from sugarcane or beets, was not known. The sources of sugar in antiquity were largely limited to honey and some fruits, such as dates.

BREAD AND BEER

> Shape these well, use the right amount.
>
> Write down what I'm saying, I have made six portions of *pezen* bread.
>
> Watch out that you work correctly, the *retab* bread should be in good condition.
>
> Bring out another *beta* bread.
>
> (Captions to scenes of breadmaking, Strudwick, *Texts from the Pyramid Age,* p. 402)

We know that bread and beer were considered the basic constituents of the ancient diet and that the cultivation of emmer wheat and barley began early in Egyptian history. Virtually every offering prayer for the dead asks for "bread and beer and all things good and pure" for the spirit of the deceased. But this also represented the general notion that the departed needed food and drink for sustenance. It is obvious that the resources for food and drink in ancient Egypt were much wider than just these basics; the possible foodstuffs available included meat, fish and poultry, various grain crops, as well as a wide range of vegetables and fruit.

The grain crops of barley and emmer wheat were among the most important food sources from the earliest times. Not only did they provide the basis of the diet in the form of bread, but allotments of grain often served as the wages for workmen and artisans. Grain was a measure of wealth – and a base for taxation. Evidence for the growing of grain can be found as early as the sixth millennium – between 6000 and 5000 BCE. As the early dwellers on the banks of the Nile began to move from the life of nomads, they learned to cultivate and process grain, and almost as important, they

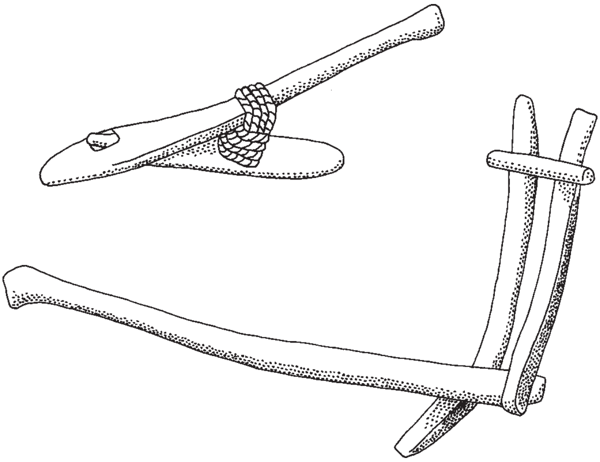


FIGURE 39 **Typical wooden agricultural implements – a hoe and a plow made completely of wood, without the advantage of metal blades.**
Drawing by Duane Stapp

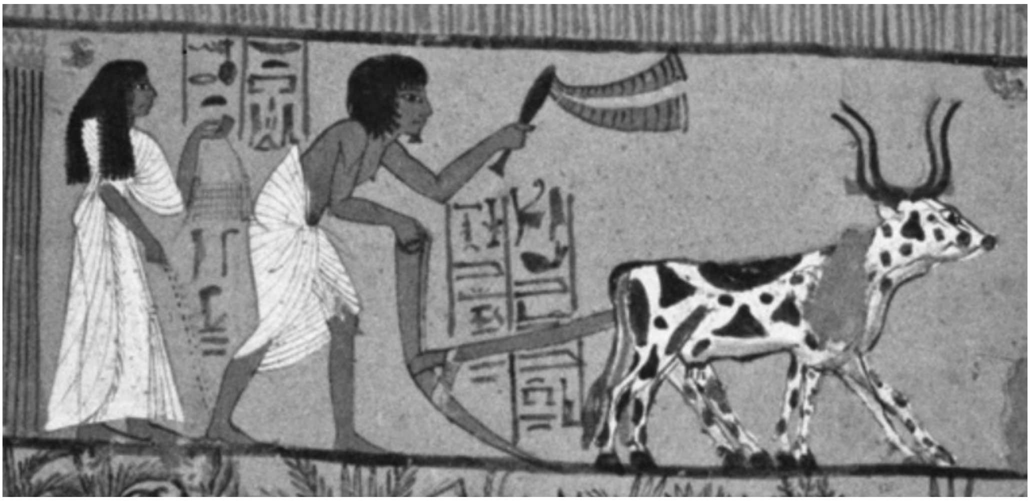


FIGURE 40 **Plowing and distributing seed. Dynasty Nineteen**
Theban Tomb 1, tomb of Sennedjem
The couple represented would have carried out these tasks only in the "Fields of the Blessed," in the afterlife, and not during their lifetime. Their dress as shown is inappropriate but the depictions of plow, whip, and seed basket are rendered accurately.
Author's photograph

learned to store it and protect it from spoilage. By trial and error over centuries efficient methods of cultivation and processing were developed. When we buy a loaf of bread at the market or bakery we hardly take into account all of the steps that went into the end product. Starting at the very beginning, the ground had to be tilled, the

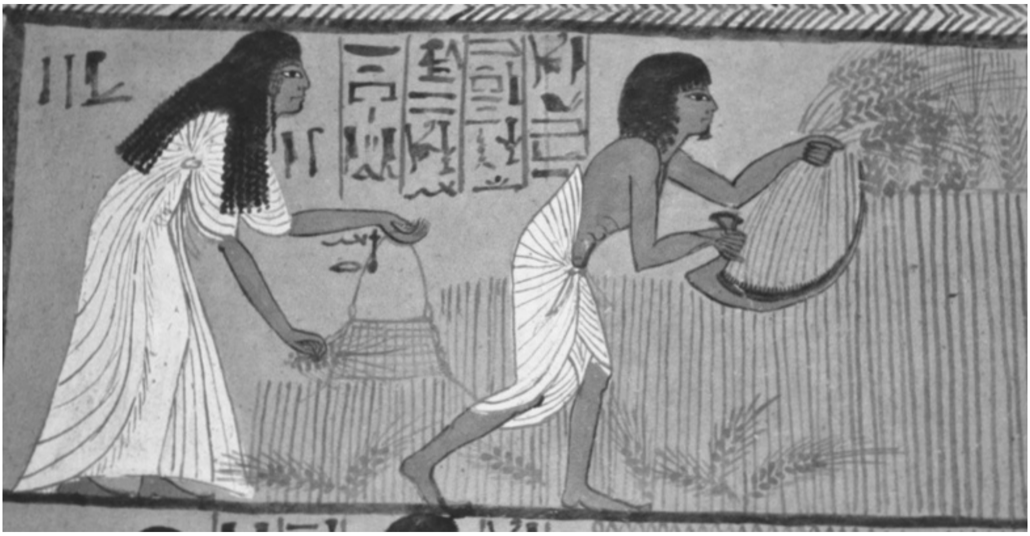


FIGURE 41 **Reaping and gathering of wheat. Dynasty Nineteen**
Theban Tomb 1, tomb of Sennedjem
As in the previous figure the persons represented would not have performed these duties in life, but the representations of reaping with a sickle and gathering into a basket are descriptive of the process. Even the technique of cutting the grain high on the stalk was standard.
Author's photograph

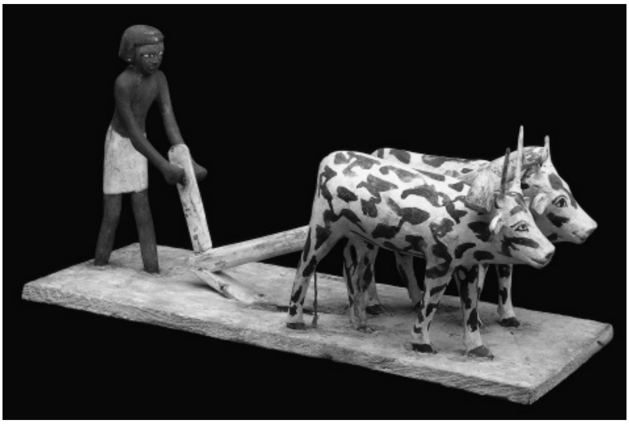


FIGURE 42 **Tomb model of a plowman. Middle Kingdom**
The simple plow and the yoke are clearly shown. Such models were included in Middle Kingdom tombs to provide the spirit with the necessities for the next life.
Photograph © The Trustees of the British Museum

method usually known as plowing (Figs. 39, 40). Once the ground was turned it had to be harrowed, or broken up into a finer condition. Sowing was apparently done by hand in ancient Egypt, and this was followed by plowing the seed under or trampling it into the earth.

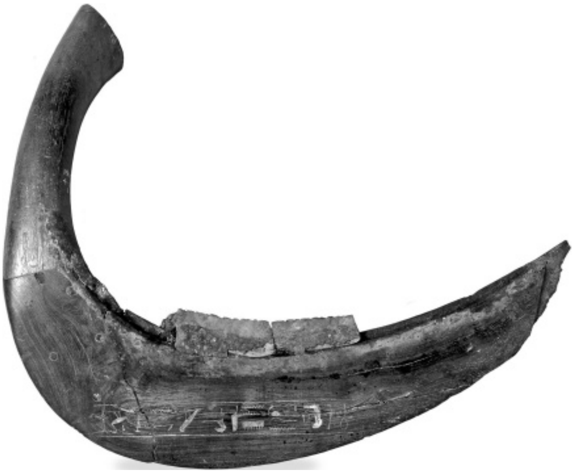


FIGURE 43 A sickle used for harvesting grain. Dynasty Eighteen
Only some of the flint blades that originally made up the cutting edge remain. The entire inner curve would have been lined with sharp flint.
Photograph © The Trustees of the British Museum

The fields had to be weeded as the crops grew. After the grain was mature it was harvested (Fig. 41). This was traditionally done by cutting it high, near the head, and preserving the stalks for animal fodder or household fuel. The grain was then taken in baskets to a place set aside for threshing, the process in which it was trampled, usually by animals, to separate the edible parts from the chaff. It was then winnowed, literally thrown up in the air so the chaff would be blown away. The grain was sieved to remove foreign materials, and it was stored until use. The last step in the process was the grinding of the grain to make flour, which for most of Egyptian history was accomplished by hand on a stone quern, or grinding surface, with another stone.

All of these steps can be documented either by representations on tomb walls, in tomb models, or with examples of the actual tools used (Figs. 40, 41, 42, 43, 44). As an example, ancient plows and models of plows have been preserved. They are very similar to modern examples, with one major difference. The Egyptian plow shears did not have a metal cutting edge that would have proved more efficient and would have made the job a little less labor intensive (Fig. 42). The principal tool for the harvest was a curved sickle made of wood (Fig. 43). The long-handled scythe had not been invented, so the use of the sickle as the main tool required the harvester to constantly bend over (Fig. 44). The preserved sickles show an ingenious use of small embedded flint blades to give the wooden tool a sharp cutting edge. The grain was collected and transported to

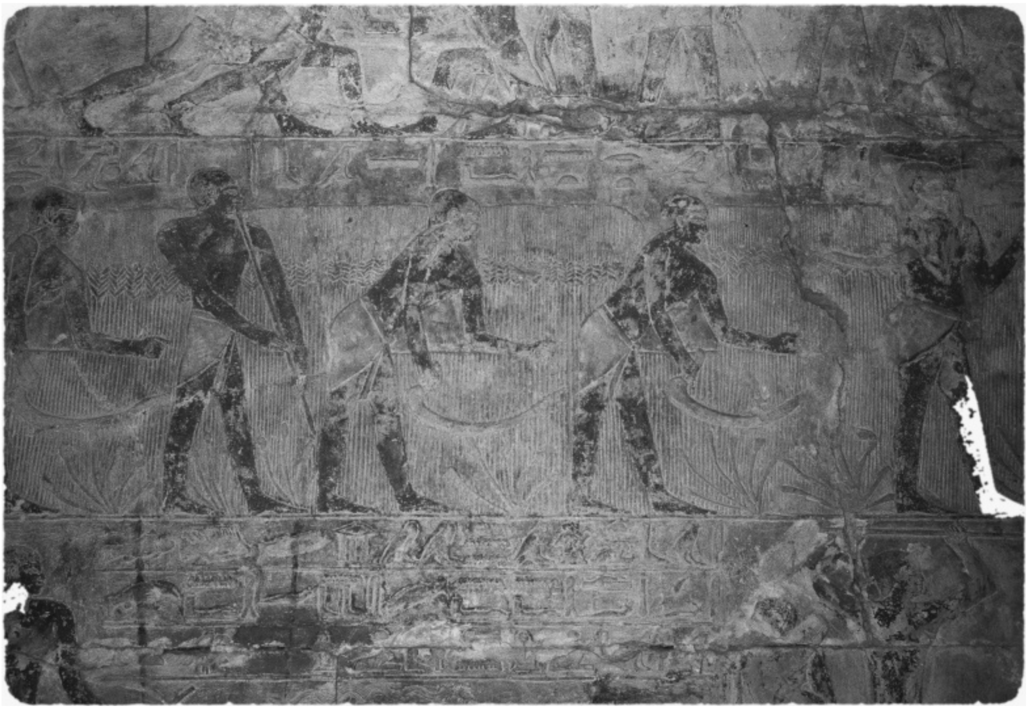


FIGURE 44 **Harvesting grain. Dynasty Six**
Tomb of Mereruka, Saqqara
Two workmen use curved sickles to harvest grain. They are accompanied by a man playing the flute. This presumably helped to keep up the pace or perhaps to make the work less tedious.
Author's photograph

the threshing floor, where it was prepared for the next process (Fig. 45). Winnowing was accomplished with specially shaped wooden paddles used to toss the grain, and sieves made of basketwork were used to aid the removal of extraneous material (Fig. 46). Examples of both paddles and sieves have been found. The grain was then stored in a granary, ready for eventual distribution (Fig. 47). The pervasive dry climate of Egypt and the protection of tombs have preserved the evidence of the actual agricultural tools in a manner not duplicated in any other ancient culture.

The staples of the diet, bread and beer, are often depicted as being produced at the same time or in the same space. This is only natural because they were both derived from the same raw material – grain. Ancient beer was different from the refined products familiar today. It was thicker almost to the point of being gruel. It had a higher protein and vitamin content, possibly furnished a good deal of the daily nutritional needs, and was perhaps safer to drink than water. Brewers' vats

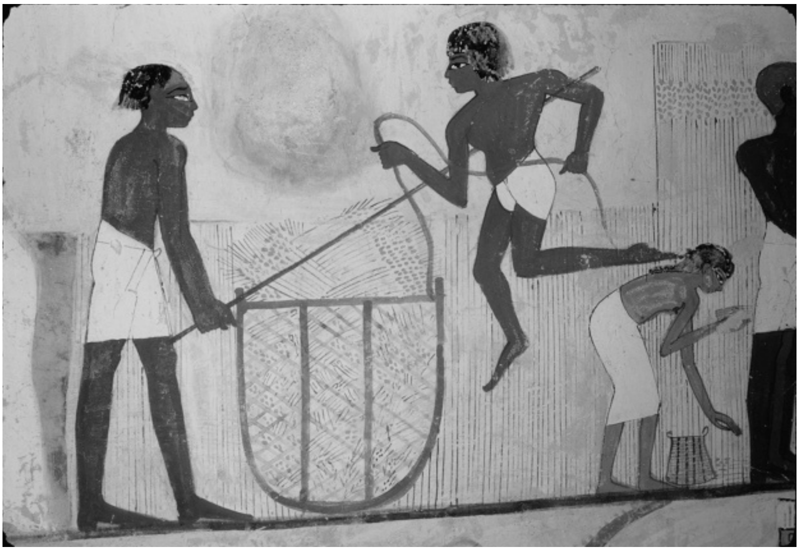
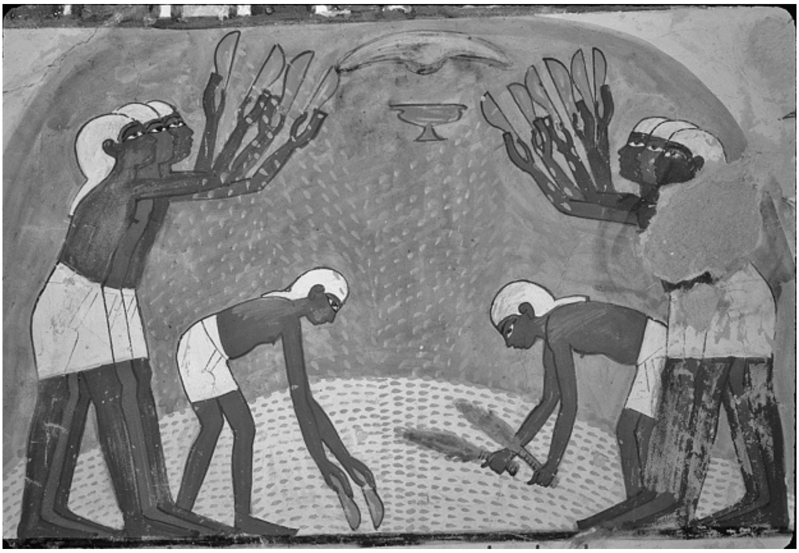


FIGURE 45 **Packing wheat into a carrying basket. Dynast Eighteen**
Theban Tomb 52, tomb of Nakht
After the reaping has been done the grain is gathered into large baskets. The unusual representation of the workman who throws his weight on the carrying pole adds liveliness to the activity.
Author's photograph

FIGURE 46 **Winnowing the wheat. Dynasty Eighteen**
Theban Tomb 52, tomb of Nakht
A group of workmen equipped with specially designed paddles throw the threshed wheat into the air to separate the grain from the chaff. They wear special head coverings presumably to keep the dust from their hair.
Author's photograph



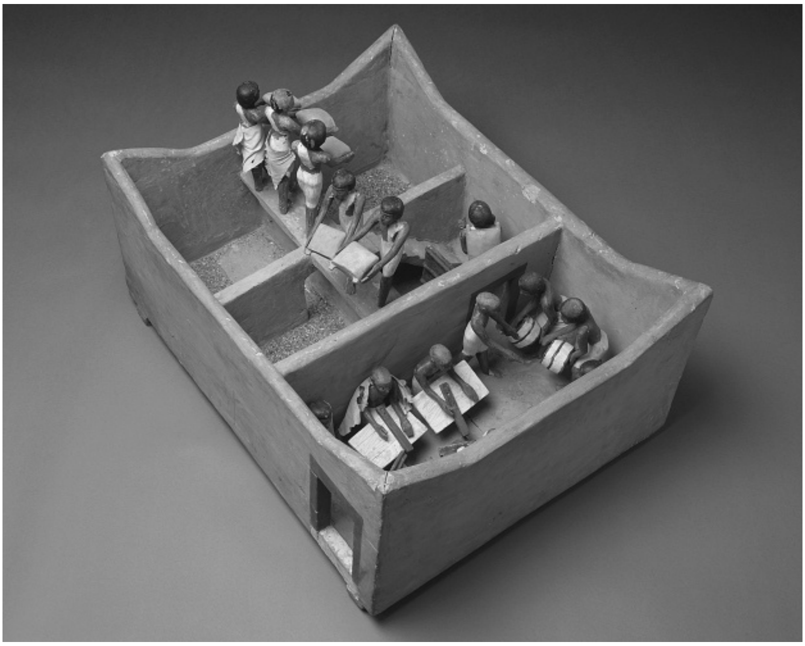


FIGURE 47 **Model of a granary. Dynasty Eleven**
Theban Tomb 280, tomb of Meketre
At the top of the image the workmen are dumping the harvested grain from their baskets into the bins of the granary. In the section below scribes with their writing boards keep the accounts of grain delivery.
The Metropolitan Museum of Art, Rogers Fund and Edward S. Harkness Gift, 1920 (20.3.11). Reproduction of any kind is prohibited without express written permission in advance from the Metropolitan Museum of Art.

have been found dating to as early as the Predynastic Period, and other structures once identified as grain storage facilities may also have been vats as well. It was long thought that the making of beer included the use of partly baked and crumbled bread soaked in water as the starting point for the process. This was based in part on observations of beer (*bouza*) preparation in the modern Sudan. The natural yeast found in the bread material could serve as an agent for the fermentation, and it seemed logical that this was the method used by the ancient Egyptians. Some current study based on microscopic examination of beer residue has attempted to reevaluate this theory and does not include the bread as a part of the brewing process. Beer obviously played an important part in nutrition however it was made.

Actual examples of bread have been found as food offerings preserved in a number of tombs, reinforcing the idea that it was an important enough staple of the diet that it had to be included in the provisions for the spirit. The bread loaves are of a number of different shapes – flat, round, triangular, and conical. The discovery of thick-walled clay bread molds shows that baking could be done using that kind of device. Bread could even be modeled in the images of gods, as a crude example preserved in the University Museum, University of Pennsylvania, attests.

Much of the production of bread making is documented in artistic representation, particularly in the servant figures of the Old Kingdom and the detailed tomb models of the Middle Kingdom. The stone servant figures include women who are grinding grain on saddle querns and men who strain beer through sieves into storage jars. The activities of sifting, grinding, mixing, and baking are shown in the tomb models with considerable attention to detail. In addition to these representations a number of actual baking sites have been found by archaeologists. One of the most recent discoveries was the large-scale remains of a bakery establishment at Giza that must have served to supply the workmen who labored on the construction of the pyramids.

WINE

There is evidence for wine as a beverage from as early in Egyptian history as the Early Dynastic Period, but most of the detailed documentation that is available to us comes from the tombs of the New Kingdom. Although there are many representations of grape cultivation on tomb walls, wine seems to have been reserved for the elite, whereas beer was consumed by the entire population. The tombs of the nobility often depict grape arbors heavy with the ripe fruit, the harvesting of the crops, and the crushing and squeezing of the final product, all processes that are shown in great detail in the representations. Of particular interest are the illustrations of workmen treading the grapes in a large tub or vat, holding on to ropes suspended from a trellis above them to prevent their slipping and falling into the mix. The last activity in pressing the grapes involved enclosing the residue in a cloth bag with two rods attached. The rods were then turned to contract the bag and squeeze the last drops of juice from the fruit. This stage is shown in detail on tomb walls as early as the Old Kingdom (Fig. 48). The juice was "bottled" in ceramic jars, which were closed with lumps of clay that often had a vent hole to release some of the gas created during fermentation. The jars could be labeled with the type of wine, the sweetness, the year date, and sometimes the name of the field of origin, not unlike modern wine bottle labels that give the information of origin and vintage. The tomb of Tutankhamun

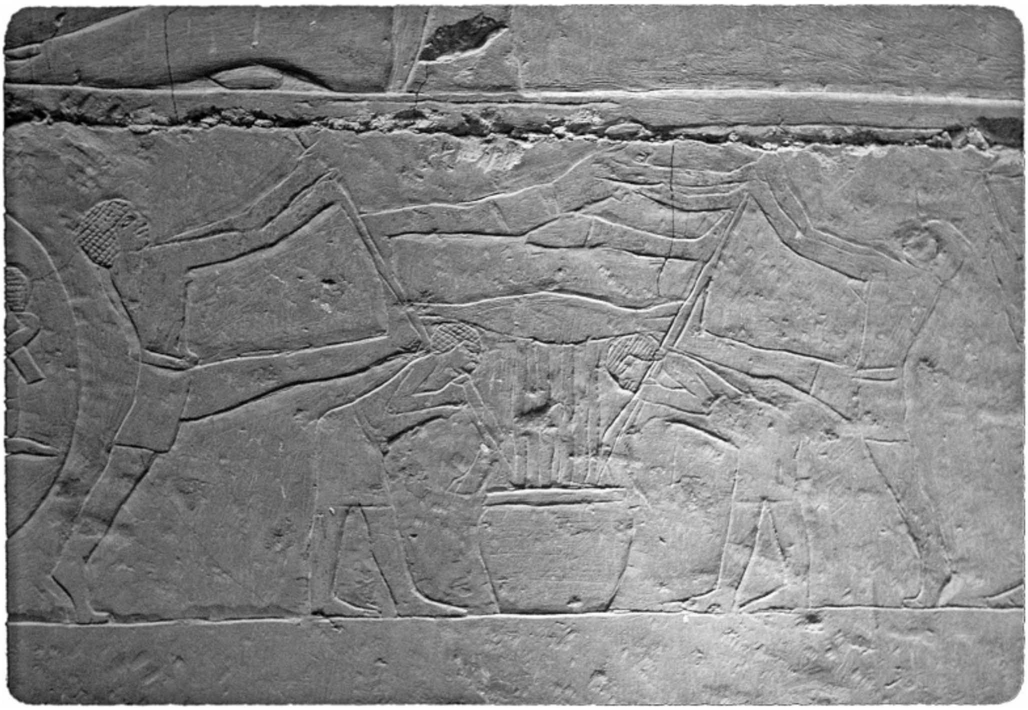


FIGURE 48 **Squeezing the grapes. Dynasty Six**
Tomb of Mereruka, Saqqara
In the wine-making process the last drops of grape juice are squeezed from a sack suspended between two poles. After the juice is collected in the container below it will be bottled in jars and marked as to source and vintage year.
Author's photograph

contained a number of wine jars specifically labeled this way. From the documentation provide by labels such as these it can be seen that some of the important areas for viticulture were in the Nile delta and in the desert oases, not so much along the banks of the river.

FRUIT, VEGETABLES, AND PULSES

In addition to the grains grown for bread and beer, the ancient Egyptians had a remarkably varied range of farm produce available to them. The fruits included two types of dates, two types of figs, pomegranates, perseas, carobs, christ's-thorns, grapes, and olives. The vegetables included onions, leeks, garlic, lettuce, and celery, several types of melon, cucumbers, possibly radishes, and chufas (tigernuts). The pulses (beans) were lentils, peas, chickpeas, and fava beans.

Dates were the product of the date palm and the dom palm, two different varieties; the figs were from the true fig and the sycamore fig trees. Pomegranate was one of the oldest cultivated fruits, and in addition to the use of the juice and seeds, even the skin was crushed to produce a dye. Perhaps not so familiar today are the persea, carob, christ's-thorn, and chufa. The persea produced a fruit that is said to be similar in taste to an apple. There is some confusion about the designation of the Egyptian "persea." The tree from Egypt is not of the modern botanical family designated *Persea*, of which the avocado is a member, so some popular identification of avocado fruit as being from an Egyptian source is in error. The carob tree produced seedpods that were used as human and animal food. The seeds could be ground and used as a sweetener, since they were high in sugar content. Christ's-thorn is a bush or tree with sharp spines, hence the name. It produced a sweet red-brown fruit. The chufa or tiger-nut was a plant that produced a tuber (like a potato) that could be ground, roasted, or baked. It was sometimes added to beer and could have been added to bread dough as well.

Onions, leeks, garlic, lettuce, celery, melon, and (possibly) radishes need little explanation except that the lettuce was of a long-stalked variety like romaine, rather than the head or ball shape more familiar to many today. There is some disagreement about the identification of cucumber, and it is suggested that what is often illustrated in tomb paintings is a variety of melon. The pulses, lentils, peas, chickpeas, and fava beans were among the mainstays of the diet. To various degrees they provided a good amount of the protein in a daily fare that was not rich in red meat. In Egypt today *foul medames* serves much the same purpose. This popular spiced mixture of brown beans is a national Egyptian dish and an important part of the diet.

Common items that are familiar to us in our own time but were missing in the ancient diet include rice, potatoes, sugarcane, and some exotics such as tomatoes. These were unknown to the ancient Egyptians and had to be introduced from foreign contexts. Even so, the daily fare of the ordinary people would come close to meeting the requirements of a healthy diet based on a variety of fresh vegetables, supplemented by bread, and including fish and fowl but little or no red meat.

MEAT

There are numerous illustrations of the rearing of animals for food, the butchering of cattle, and the preparation of cuts of meat, but

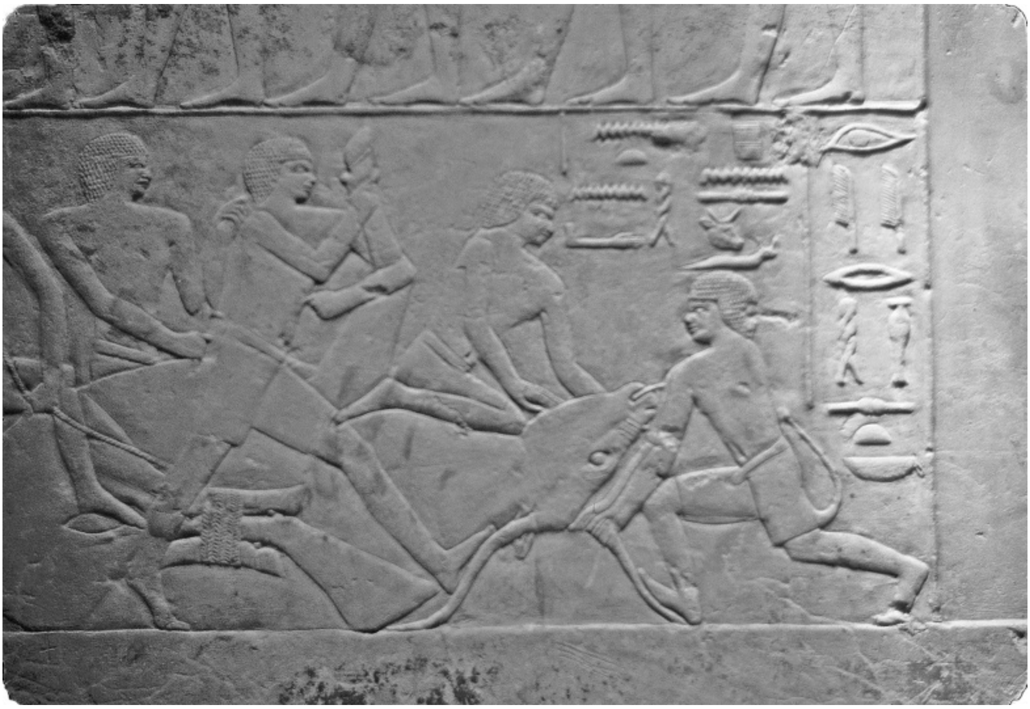


FIGURE 49 **Slaughtering a bull. Dynasty Six**
Tomb of Meryruka, Saqqara
Slaughtering required teamwork on the part of several workmen, some to hold and immobilize the animal and others to do the actual rendering. One man braces his foot on the animal's horn to prevent injury from a sudden movement.
Author's photograph

these occur in the tombs of high-placed functionaries, and meat was not a steady part of the diet for everyone (Fig. 49). The raising of cattle, goats, sheep, and pigs eventually became an important part of the agricultural life of ancient Egypt. In the beginnings of Egyptian culture, meat was mainly obtained through hunting and trapping. The abundant varieties of wildlife available in the grasslands and the foothills adjacent to the Nile made this possible. The gradual process of domestication concentrated on the animals mentioned, as well as poultry, consisting mainly of ducks and geese. These resources were supplemented by the development of efficient fishing techniques that ensured a wide variety of fish. In the Old Kingdom there is pictorial evidence for the attempt to domesticate hyena and various types of antelopes, but these do not seem to have proved popular or practical enough for this practice to continue for long. The notion that pork was not eaten by the Egyptians is a common misunderstanding, derived from accounts of Greek and Roman authors. There is considerable evidence to the contrary.

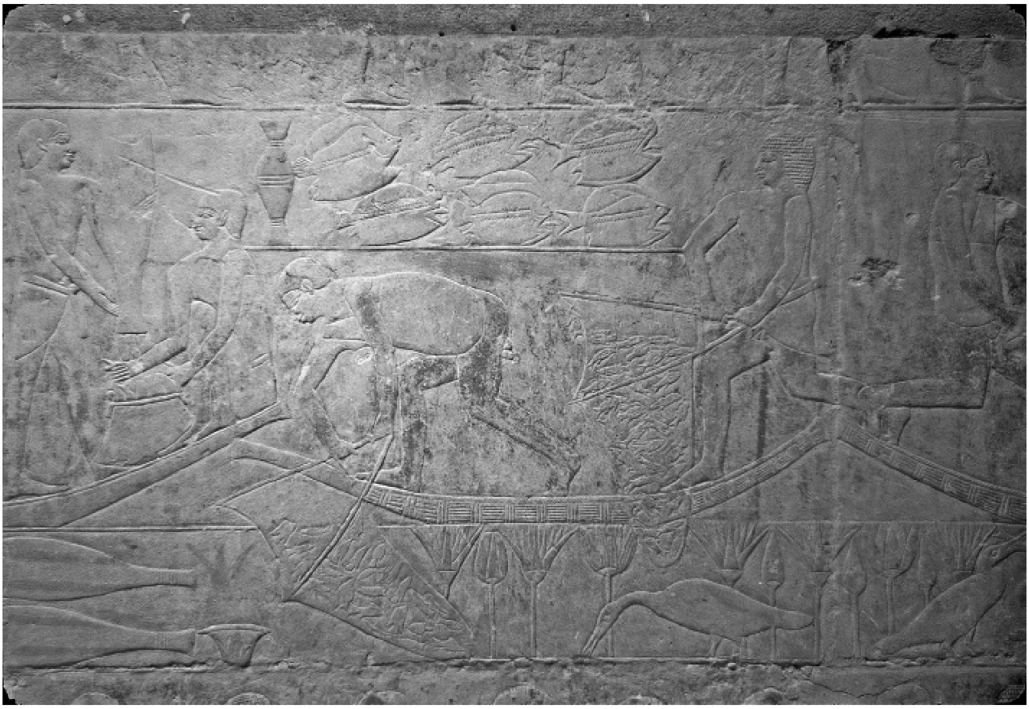


FIGURE 50 **Catching fish with a dip net. Dynasty Six**
Tomb of Meryruka, Saqqara
Two men catch fish with handheld dip nets. The nets are spread with wood sticks or battens and the results of the catch are displayed above, where the fish have been laid out to dry.
Author's photograph

Fishing in the Nile was a major industry. The common methods employed were hook and line, spearing or harpooning, and the use of both the dip net and the dragnet. Illustrations of fishing with a line show multiple hooks on a single line. The hooks were made of copper (or bronze) and were barbed. Spearing may have been an early method of fishing to judge from depictions where a harpoon with a detachable head secured by a cord is used. When spearfishing is illustrated as an activity of the nobility in the parallel "fishing and fowling" scenes, it seems to have been more ritualistic than practical. Of the various kinds of nets, the dip net was handheld, supported and spread by two wood sticks or battens forming the net into a triangular shape (Fig. 50). There is a bit more information about the larger dragnet than the other methods of fishing because it is more often illustrated in tomb decoration. The dragnet was supported on the top edge by wood floats and held down on the bottom edge by stone weights (Fig. 51). The tomb reliefs and paintings suggest that it

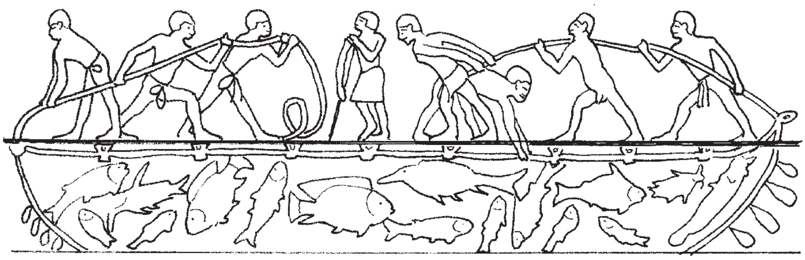


FIGURE 51 **Fishing on a large scale. Old Kingdom**
After Lepsius, *Denkmaeler,* Vol. 2, plate 9
This is a typical example of dragnet fishing, where the net is spread by wood floats at the top and stone weights at the bottom. In representations such as this it is difficult to tell if the participants are standing on the shore; they are more probably meant to be on a raft.
Drawing by the author

was managed from a raft or platform, but a model from the tomb of Meketre shows the dragnet hauled between two papyrus boats.

The frequent illustration of the preparation of fish suggests that it was an important part of the diet. In most depictions of the process the fish are shown as gutted and laid open, probably to facilitate the process of drying and preservation. It is obvious that it was not always possible to consume all of the meat from a freshly slaughtered animal or all of a catch of fish. The preservation of fish, meat, and poultry from spoilage was a challenge, especially with the limited storage facilities available. The principal means of preservation before the time of refrigeration and freezing were drying, salting, smoking, and curing. Drying was accomplished by slicing the material thinly so as not to trap moisture, and by exposing it to sun and/or air. Drying worked for both meat and fish, which were split and spread, but it was not used on geese or ducks. Salting, or packing the foodstuff in salt, either dry or in brine, prevented most forms of decay. Birds could have been preserved in brine, and fish as well as roe (fish eggs) were certainly salted. Of the various methods available smoking is probably a more efficient way of preserving meat, but there is little evidence for this technique having been used in ancient Egypt. Curing as a means of preservation requires packing the food material in animal fat, beer, or honey, but there is also little evidence of these methods having been used.

During the long history of ancient Egypt the diets of all classes changed very little. The frequent representations of food cultivation, animal husbandry, and all manners of food processing are represented with similar content from the Old Kingdom to the end of Pharaonic history. Agriculture was the mainstay of the country and its civilization, and almost all of the people ate well, although the diet, as has been pointed out, varied depending on wealth and social class. Due to the amount and variety of evidence preserved, the cultivation and preparation of food are aspects of the Egyptian experience that we know perhaps better than any others activities.

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